



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,136	09/30/2003	Henrik Ovesen	900.43156X00	3836

20457 7590 04/26/2005

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

PARSLEY, DAVID J

ART UNIT	PAPER NUMBER
----------	--------------

3643

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,136

Applicant(s)

OVESEN ET AL.

Examiner

David J Parsley

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Amendment

1. This office action is in response to applicant's amendment dated 2-28-05 and this action is final.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains legal phraseology in particular the term "means". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3643

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,487,699 to Tyrrell et al.

Referring to claim 8, Tyrell et al. discloses a method for gas stunning of animals for slaughter arriving at the slaughterhouse in transport crates – at 22, where gas stunning of the animals is achieved while the animals are still in the transport crates – see figure 1, and where the transport crates and the animals are conveyed successively by means of conveyors – at 20,24,28,34, through a stunning chamber – at 10, wherein an influence of the gas for stunning the animals is adjusted while the animals are within the stunning gas by shortening or lengthening a conveying time and adjusting a conveying route within the stunning gas of the transport crates – at 22 through the stunning chamber – at 10 – see for example figure 1 where the conveying route is modified at conveyor – 24 and column 3 lines 35-67 and column 4 lines 1-33 where the conveyor speed is intermittent and thus adjustable.

Referring to claim 9, Tyrell et al. discloses shortening or lengthening of the conveying time through the stunning chamber is achieved by increasing or reducing a speed of the conveyors – see for example column 3 lines 35-67 and column 4 lines 1-33.

Referring to claims 10-11, Tyrell et al. discloses adjustment of the conveying route through the stunning chamber is achieved by lowering or lifting a substantially horizontal conveyor – at 24, wherein the conveyor provides for the conveying of the transport crates through the stunning chamber within the gas for stunning between a downwards running conveyor – at 23,26, and an upwards running conveyor – at 31-32 – see for example figure 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyrell et al. as applied to claims 8-11 above, and further in view of WO Patent No. 94/27425 to Jull et al.

Referring to claims 12-15, Tyrell et al. does not disclose an influence of the gas for stunning the animals is adjusted by varying the gas concentration at varying levels in the stunning chamber as increasing gas concentration is applied in a downwards direction in the stunning chamber. Jull et al. does disclose an influence of the gas for stunning the animals is adjusted by varying the gas concentration at varying levels in the stunning chamber – at 40 or 106, with an increasing gas concentration being applied in a downwards direction in the stunning chamber – see for example pages 13-14. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Tyrell et al. and add the stunning chamber with varying gas levels of Jull et al., so as to reduce the loss of gas from the stunning chamber.

Claims 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyrell et al. or Tyrell et al. as modified by Jull et al. as applied to claims 8-15 above.

Referring to claims 16-23, Tyrell et al. and Tyrell et al. as modified by Jull et al. further disclose a substantially horizontal conveyor – at 24, which receives and introduces the transport

Art Unit: 3643

crates – at 22, and animals for slaughter into a gas filled stunning chamber – at 10 – see figure 1 of Tyrell et al., in which a downwards running conveyor – at 23,26, is arranged for successively conveying transport crates downwards in the stunning chamber and an upwards running conveyor – at 31,32, which arranged for successively conveying the transport crates upwards out of the stunning chamber – see for example figure 1 of Tyrell et al., wherein the downwards running conveyor comprises substantially vertical conveyors – at 23, which support the opposite sides of the transport crates – at 22; for downwards conveying of the transport crates in the stunning chamber – see for example figure 1 of Tyrell et al., the upwards running conveyor – at 31,32, comprises a substantially vertical conveyor comprising mutually interacting endless chain conveyors which support opposite sides of the transport crates – at 22, for upwards conveying from the stunning chamber – see for example figure 1 and column 4 lines 1-15 of Tyrell et al., and between the downwards and upwards running conveyors there is a substantially horizontal conveyor – at 24,28,34, which provides horizontal conveying of the transport crates – at 22, through the stunning chamber, which horizontal conveyor further is lifted and lowered respectively between levels with varying gas concentrations in the stunning chamber – see for example – at 24 in figure 1 of Tyrell et al. Tyrell et al. and Tyrell et al. as modified by Jull et al. further discloses the downwards conveyor is an electric conveyor – see column 3 lines 60-67 of Tyrell et al. Tyrell et al. and Tyrell et al. as modified by Jull et al. do not disclose the upwards conveyor comprises mutually interacting endless chain conveyors, however it would have been obvious to one of ordinary skill in the art to take the device of Tyrell et al. or Tyrell et al. as modified by Jull et al. and add the upwards conveyor comprising chain conveyors, so as to facilitate lifting of the transport crates. The use of chains for conveying means is well known in

the butchering/slaughtering art and therefore it would have been obvious to one of ordinary skill in the art to take the electric conveyor of Tyrell et al. and make it a chain conveyor.

Claims 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyrell et al. as modified by Jull et al. as applied to claims 16-23 above, and further in view of U.S. Patent No. 5,788,564 to Chamberlain.

Referring to claims 24-31, Tyrell et al. as modified by Jull et al. further discloses the stunning chamber is divided into a lower zone, an intermediate zone and an upper zone – see figure 6 of Jull et al. Tyrell et al. as modified by Jull et al. does not disclose sensors provide for monitoring and control respectively of the gas concentration in the zones. Chamberlain does disclose sensors – at 40, provide for monitoring and control respectively of the gas concentration in the zones – see for example column 3 lines 18-40. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Tyrell et al. as modified by Jull et al. and add the sensors to monitor the gas concentration of Chamberlain, so as to automatically maintain the proper level of gas inside the stunning chamber. Tyrell et al. as modified by Jull et al. and Chamberlain does not disclose the gas concentration of the gas for stunning of the lower zone is 45-51%, the gas concentration of the intermediate zone is 32-46% and the gas concentration of the upper zone is 8-10%, however the gas concentration levels are values determined via experimentation and it appears that the device of Tyrell et al. as modified by Jull et al. and Chamberlain would perform equally as well with the gas levels of the lower zone being 45-51%, of the intermediate zone being 32-46% and the upper zone being 8-10%. Further, as seen in paragraph [0015] in applicant's disclosure the level of gas concentration in the stunning chamber

has very little effect on the effectiveness of the claimed invention and therefore the gas concentration levels are not a critical part of the invention.

Claims 32-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyrell et al. as modified by Jull et al. as applied to claims 16-23 above, and further in view of U.S. Patent No. 5,902,177 to Tessier et al.

Referring to claims 32-40, Tyrell et al. as modified by Jull et al. further discloses a control system controlling mutually dependent mechanical parameters of speed of vertical conveyors, number of transport crates in the stunning zones, a cycle of crates in the stunning zone, number of animals per crate, a speed of a slaughtering line and a speed cycle between crates in the stunning zone – see for example figure 1 and columns 3-5 of Tyrell et al. and figures 1-6 and pages 9-18 of Jull et al. Tyrell et al. as modified by Jull et al. does not disclose the control system is a PLC. Tessier et al. does disclose using a PLC controller – at 105. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Tyrell et al. as modified by Jull et al. and add the PLC controls of Tessier et al., so as to allow for the device to be automated with selected parameters being variable and programmed by the user.

Response to Arguments

5. Regarding claim 8, the Tyrell et al. reference does disclose adjusting the influence of a gas on the stunning animals by shortening or lengthening the conveying time of the animals in the stunning chamber as seen in figure 1 and column 3 lines 35-67 and column 4 lines 1-33, where the speed of the conveyor is variable and thus the length of time the stunning animal spends in the stunning chamber is adjusted to vary the amount of time the stunning animal is

Art Unit: 3643

under the influence of the stunning gas in the stunning chamber. Further, the Tyrell et al. reference discloses adjusting the conveying path of the stunning animals through the stunning chamber and the stunning gas as seen in figure 1 and column 3 lines 35-67 and column 4 lines 1-33, where the stunning animals are conveyed in a vertical path in the gas portion of the chamber – at 10, via the conveyor – at 23, and then are conveyed in a horizontal path – at 24-28 in the gas of the chamber – at 10, and are then conveyed in a vertical path – at 32 in the gas of the chamber – at 10. Therefore, the change from a vertical path to a horizontal path and back to the vertical path in the gas of the stunning chamber causes the path of the stunning animals to be adjusted and varied. Further, as seen in figure 6 of Tyrell et al. the conveyor – at 42 is inclined with respect to the other conveyors – at 24-32 within the stunning chamber and therefore the path of the inclined conveyor allows for the path of the stunning animals in the stunning chamber to be adjusted into differing positions within the stunning chamber.

Regarding claims 10-11, the Tyrell et al. reference discloses lowering or lifting a horizontal conveyor – at 24 via the conveying apparatus – at 23 as seen in figure 1, with the conveyor – at 24 being located between a downward running conveyor – at 23, and an upward running conveyor – at 32 as seen in figure 1.

Regarding claims 12-15, the Jull et al. reference WO 94/27425 does disclose an influence of the gas for stunning the animals is adjusted by varying the gas concentration at varying levels of the stunning chamber as increasing gas concentrations is applied in a downwards direction in the stunning chamber – at 106 as seen in figure 6, where the stunning chamber contains both air at the upper portion of the chamber and the stunning gas at the lower portion of the chamber – at 106. Therefore, the interface between the air in the upper portion of the stunning chamber and

Art Unit: 3643

the gas in the lower portion of the stunning chamber contains both air and the stunning gas and therefore the chamber contains varying amounts of gas depending on the portion of the chamber in which the stunning animal is located. Therefore, the amount of stunning gas added to the stunning chamber – at 106, varies the levels of gas content in the chamber since air is also in the stunning chamber as seen at 108 and 110 in figure 6.

Regarding claims 16-23, the Tyrell et al. reference in combination with the Jull et al. reference discloses all of the claimed limitations of these claims as seen above in paragraph 4 of this office action except for the conveyor being a chain conveyor. However, the use of a chain conveyor is well known to those of ordinary skill in the art as seen in paragraph 4 above in this office action.

Regarding claims 24-31, the Tyrell et al. reference in combination with the Jull et al. reference and the Chamberlain reference US 5788564 render the claims obvious as seen in paragraph 4 of this office action above.

Regarding claims 32-40, the Tyrell et al. reference as modified by the Jull et al. reference and the Tessier et al. reference render the claims obvious as seen in paragraph 4 above of this office action.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J Parsley whose telephone number is (571) 272-6890. The examiner can normally be reached on 9hr compressed.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

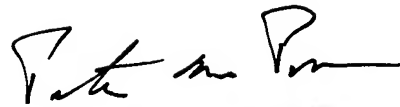
Application/Control Number: 10/673,136

Page 11

Art Unit: 3643



David Parsley
Patent Examiner
Art Unit 3643



PETER M. POON
SUPERVISORY PATENT EXAMINER

4/22/05